Field Comment Log
AC 20-149A FIS-B

#	Commenter	Page & Para. No.	Comment	Reason for Comment	Suggested Change	Comment Resolution
	AFS-360	Pg. 1, 1b	Second sentence includes controllers & dispatchers.	FIS-B is for in-flight use. Controllers & dispatchers will use traditional approved weather sources when planning and controlling operations	….capacity of the National Airspace System (NAS). Its timely delivery of quality, accurate, and consistent information supports operational decision making by pilots.	**Accepted –** As suggested
	AFS-360	Pg. 1, 2a	First sentence misuses UAT term by inferring that it's a system operating frequency	UAT = avionics not a system operating frequency	a. There are two methods of receiving FIS-B products on the flight deck. The FAA provides FIS-B data through the Surveillance and Broadcast Service (SBS) over the 978 MHz frequency. Aircraft receive this data through a Universal Access Transceiver (UAT) for domestic operations below 18,000 feet.	**Accepted –** As suggested

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	AFS-360	Pg. 1, 2b	Use of "sends" and "appropriately equipped aircraft" are non-specific	Use of "broadcasts" and "UAT equipped aircraft" would more accurately represent how FIS-B functions	The FAA SBS FIS-B provider broadcasts a basic set of free weather and aeronautical products for use by UAT equipped aircraft	**Accepted –** As suggested
	AFS-360	Pg. 2, 2b(13)	"Special Activity Airspace (SAA) Status" is an internal FAA centric term and out of context for intended audience. See AIM Pilot/Controller Glossary	Pilots are trained and understand this airspace to be "Special Use Airspace (SUA)"	Replace (13) with "Special Use Airspace (SUA)"	**Accepted –** As suggested
	AFS-360	Pg. 2, 2c(4)	See comment above		Replace (4) with "SUA depictions"	**Accepted –** As suggested
	AFS-360	Pg. 2, 2d	Figure 1 represents a one-way, non-addressed, broadcast FIS-B service that uses….	Grammatical/readability	Figure 1 represents a one-way, non-addressed, FIS-B broadcast service that uses….	**Accepted –** As suggested
	AFS-360	Pg. 2, 2d	….to the broadcast communication subnetwork (2a), where the FIS-B service is sent to the aircraft and displayed….	FIS-B service broadcasts FIS-B data/products	…..to the broadcast communication subnetwork (2a), where the FIS-B data is broadcast to the aircraft and displayed	**Accepted –** As suggested
	AFS-360	Global change	Use "FIS-B avionics" when referring to aircraft centric FIS-B equipment			**Accepted –** As suggested

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	ANM-111	Page 4 Para 5.a	Describe the intended function of situational awareness found in the following paragraph. **5. Safety Assessment Considerations.** **a.** This AC describes the operational context as part of the safety assessment considerations. For the FIS-B services and products specified in this AC, FIS-B information is limited to advisory information used to support situation awareness only and therefore is expected to have a hazard classification no greater than minor.	Part 25 guidance that the words "situation awareness" is not descriptive enough to determine the intended function. See Para 5-3 b in AC 25.1302-1 for an example of this guidance. Also view chap 2 Para 11. C. in AC 25-11A on situation awareness.	Follow the recommended guidance in AC 25.1302-1 and 25-11A.	**Accepted –** Reviewed suggested documents and revised text to enhance pilot awareness of weather and airspace conditions only.

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	ANM-111	Page 4 Para b.	Add or point to the process used to determine a minor condition. b. Loss of FIS-B function is considered a minor failure condition.	Rationale behind minor failure is not provided.	Provide additional detail on minor determination. It could be as simple as stating what process was used for the determination. Example reference AC 25-11A CHAPTER 4. SAFETY ASPECTS OF ELECTRONIC DISPLAY SYSTEMS **21. General.** This chapter provides additional guidance and interpretative material for applying §§ 25.1309 and 25.1333(b) to the approval of display systems.	**Accepted –** Revised text to include the need for a safety assessment and pointed to the guidance to conduct same. In addition added text stating that if the assessment results in a hazard no greater than minor than this AC is applicable for your FIS-B Avionics

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	ANM-160S	Pg 6, Para 6.(c)(7)	Instead of referencing the current revision recommend referencing AC 25-11 and 23.1311-1 "*latest version"*	Update to AC 25-11A to AC-25-11***B***, to be finished soon by TSS and includes new appendix specifically addressing display of weather information on the flight deck for Part 25.	Refer more generically to "latest version" of the subject AC's	**Partially accepted –** Agree with the concept. However, we included the note in the reference document section. In addition, if AC 25-11B is published prior to this AC we will include the latest date and revision.
	ANM-160S	Pg 6, para 7.	Remove 2nd use of "other" from the first sentence: "Electromagnetic compatibility tests should be performed to demonstrate that the FIS-B equipment does not adversely affect other aircraft systems, including *other* required radio systems."	FIS-B identified as an advisory system only earlier in document.	Change to: "*Electromagnetic compatibility tests should be performed to demonstrate that the FIS-B equipment does not adversely affect other aircraft systems, including ~~other~~ required radio systems."*	**Accepted –** As suggested

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#	Commenter	Page & Para. No.	Comment	Reason for Comment	Suggested Change	Comment Resolution
	ANM-160S	Pg 7, para 11.	Use of simply "situational awareness only" is too vague in suggested text for A/RFMS.	Intended function should be better defined than simply "situational awareness."	Recommend changing first sentence to the following: "*FIS-B is intended to enhance pilot awareness of weather and airspace conditions. It does not satisfy pre-flight planning requirements or replace positive two way communication when making safety critical weather or routing decisions."*	**Accepted –** As suggested

	ANM-111	Page 7 & 8 Para 11.	**Same comment as above (comment 1) regarding Situation Awareness** **11. A/RFM Supplement.** A/RFM or A/RFM supplement wording for operating procedures applies to FIS-B installations covered by this AC. The A/RFM, Section 3, *Normal Operating Procedures*, should state the following: *FIS-B information is for situation awareness only. Use FIS-B weather and NAS status information as follows:* *(a) To aid pilot situation awareness of hazardous meteorological conditions and awareness of the regulatory status of the airspace.*mm/dd/13 AC 20-149A 8 (b) *To cue the pilot to communicate with the ATC controller, FSS specialist, operator dispatch, or AOCC for more information about the current meteorological conditions or regulatory airspace status.* (c) *FIS-B information is meant to aid strategic flight planning only. It lacks sufficient resolution and updating necessary for tactical*	Again, same comment as above on SA. This provides a better description but it still lacks detail. Perhaps think of it this way. If I wanted to test the intended function of FIS-B what parameters would I use in determining if FIS-B meets its intended function? For example I assume it provides azimuth to the location with a certain accuracy, It provides location with a given accuracy, and so on. What information does it provide to cue the pilot to ask for more information? Perhaps one can point to other documents to get this information.	See reason for comment and suggestions.	**Accepted –** As previously suggested

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	ANM-111	Previous AC 20-149	**The previous AC 20-149 contained this statement.** Paragraph 7(d) of AC 20-149, *Safety and Interoperability Requirements for Initial Domestic Flight Information Service-Broadcast*, indicates an exclusion to the acceptability of RTCA/DO-267A, *Minimum Aviation System Performance Standards for Flight Information Services-Broadcast (FIS-B) Data Link, Sections 2.0 and 3.0*, for part 25 airplanes.	Asking for the rationale behind the removal of this from the draft AC 20-149A.	Asking for rationale behind this removal before suggesting a change.	**Accepted –** Restored the original statement from AC 20-149.
	ANM-111		Part 25 is currently prepared to publish a weather appendix to AC 25-11A. It will then become AC 25-11B.	For coordination I recommend that the FAA side of the house working AC 20-149A examine the draft AC 25-11B to make sure they are consistent. Contact loran.haworth@faa.gov for a copy.	See reason for comment.	**Accepted –** Obtained the draft AC 25-11B and reviewed for consistency.

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	ACE-100	Pg 3, para 3, Figure 1	In the Communication Subnetwork area, the graphic for the ground-based transmitter should be a darker color.	Hard to see the light gray.	Change the color of the ground-based transmitter tower to black or a darker gray.	**Accepted –** As suggested, darkened the tower
	ACE-117C	Page 5, para 6.c.	Incorrect document date	Incorrect date	change date from April 8, 2004 to April 29, 2004	**Accepted –** As suggested
	ACE-117C	Page 6, para 6.d.(7) Note:	Incorrect document number	Correct AC number reference	Change "AC 25-1322" to "AC 25.1322-1"	**Accepted –** As suggested
	ACE-114	Page 6, Para X	Recommend adding paragraph X, Anti-Ice Protection, after paragraph 8.	Standard considerations for antenna installations.	**Anti-Ice Protection** If the aircraft is approved for flight into known icing conditions, the antenna must not accumulate harmful amounts of ice that may be ingested into the engine, degrade aerodynamic performance, or adversely affect the structural integrity of the aircraft. Reference the appropriate AC for the respective category aircraft (AC 2X.1419).	**Accepted –** As suggested

#	Commenter	Page & Para. No.	Comment	Reason for Comment	Suggested Change	Comment Resolution
		Page 6, Para 9	Recommend adding one more sub-paragraph c in paragraph 9, "Additional Installation Consideration" Recommend adddesign guidance for antenna installations	Standard considerations for antenna installations.	9.c. Any modifications to the aircraft to install a new antenna need to be evaluated as part of the airworthiness approval for their impact on aircraft structure. Examples are evaluating and testing antenna installations for buffet and vibration. For specific guidance relating to modifications in the fuselage structure, see AC 43.13-2 (latest revision).	**Accepted –** Added additional text to paragraph 9 on general installation guidance to include antennas if applicable.
	ACE-117C	Page A-1, Appendix **Flight Information Services (FIS).**	Incorrect document revision and date	There is a later document revision and date	Change "14th Edition" to 15th Edition"; Change date to 2007	**Accepted –** As suggested
	ACE-100	A-1	Under NEXRAD definition, no need to use uppercase "D" when stating "…Doppler weather radar…"	Editorial	Change "Doppler" to read "doppler"	**Accepted –** As suggested
	ACE-117C	Page A-2, Appendix	grammar	grammar	Change "UAT transmit on 978 MHz" to "UAT transmits on 978 MHz"	**Accepted –** As suggested

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	ACE-100	Throughout	Need consistency when referencing RTCA Documents. Sometimes it is shown as "RTCA/DO-267A" and other times "RTCA DO-267A". Choose one and use it throughout	Inconsistency	Change as seen fit.	**Accepted –** As suggested